File Patents

PENDING APPLICATIONS

Law Department - Patent Section
Philip Morris Management Corp.
Privileged and Confidential

22 October 1991

2020110315

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 964 - SN 204974

SMOKING COMPOSITIONS

Y. Houminer and H. Grubbs
Chemical Research

This invention provides tobacco and non-tobacco smoking compositions which contain a heterocyclic-hydroxy-substituted carboxylate compound as a flavorant additive.

Schardt/D&O

11-7-80	Filed in PTO; assignment recorded.
9-14-81	Restriction requirement.
11-26-82	Response electing Group III (claims 11-31).
3-1-83	1st action indicating informal allowance.
4-18-84	Memo to inventors/manager recommending abandonment in view of art cited in corresponding foreign cases.
4-20-84	Amendment filed.
6-11-84	Farone indicated that no further action be taken in view of cited art.
12-5-84	Director review--Schardt reviewing this case and related DIVs.
7-10-89	Notice of allowance--claims 10-31 allowed.
8-9-89	Issue fee paid.
2-15-90	Depaoli asked to check status - Patent Office cannot locate file.
4-25-90	Letter from Depaoli--PTO quality control audit--to be re-examined.
10-4-91	Depaoli instructed to file status inquiry.

Corresponding foreign applications/patents in: Argentina, Australia, Brazil, Canada, and Venezuela

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20201110316

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1083 CONT II - SN 115640 *** ISSUED ***

(Delta) PROCESS FOR MAKING A CARBON HEAT SOURCE AND SMOKING ARTICLE INCLUDING THE HEAT SOURCE AND A FLAVOR GENERATOR

J. Hearn, H. Lanzillotti, and G. Burnett
Cigarette Technology

The present invention relates to a process for producing a tasteless carbon heat source from a preformed article of a ligno-cellulosic material according to which the article is pyrolyzed in a continuously exchanged inert atmosphere at a temperature within the range of from about 800 degrees to about 1100 degrees C, for from about 0.5 to about 3 hours, then cooled in the inert atmosphere at a rate of from about 500 degrees to about 10 degrees C per hour to a temperature within the range of from about 275 degrees C to about 25 degrees C, and then subjected to at least one additional process step selected from an oxygen absorption step, a salt impregnation followed by heat treatment step, and a water desorption step. The present invention also relates to a smoking article including the carbon heat source, and a flavor generator comprising a substrate material containing at least one thermally releasable flavorant.

Schardt/F&N/Isackson
10-26-87 Filed in PTO--Continuation of abandoned AN 843930; new claims 24-41 added.
10-29-91 Issued 5060676.

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PM 1195 CONT - SN 129537 *** ISSUED ***

CIGARETTES HAVING MINIMIZED LOOSE ENDS AND A PROCESS FOR PREPARING SAME

N. B. Rainer (retired)

Cigarettes having reduced loose end propensity are prepared from shredded smoking material having been uniformly treated with a free-flowing non-deliquescent, hygroscopic powder and aged prior to introduction into a cigarette-making machine. The powder preferably has a size between about 50 and 200 microns, and becomes tacky upon absorption of moisture.

Schardt/F&N/Brook
12-7-87 Filed in PTO with preliminary amendment and information disclosure statement.
10-29-91 Issued: 5060663.

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20201103 17

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1200DIV - SN 618913

NOVEL NICOTINE ANALOGS

T. Osdene, H. Secor, and J. Seeman
Chemical Research

A novel class of nicotine analogs which as therapeutic agents exhibit tranquilizing effects in mammals. An example is 1-(3-dimethylaminopropyl)-2-(3-pyridyl)pyrrolidine. The nicotine analogs can exist in the form of acid addition salts.

Schardt/Depaoli

11-28-90	Filed in PTO with preliminary amendment.
7-16-91	1st action.
7-24-91	Amendment filed.

Foreign applications corresponding to the parent case were filed in Japan and the EPO designating all countries except Luxembourg.

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PM 1213 CIP IV REISSUE - SN _____

METHOD AND APPARATUS FOR COATING EXTRUDED TOBACCO-CONTAINING MATERIAL

G. D. Keritsis

Schardt/F&N/Radulescu

6-12-91	F&N instructed to file reissue application to amend Claim 1.

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20201103 18

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1246 - SN 630481

(Filter Technology) FLAVOR-ENHANCING SMOKING FILTER

G. Keritsis

A flavor-enhancing smoking filter having at least two concentric zones, including at least one filtering zone and at least one flavor-enhancing zone. The flavor-enhancing zone(s) have a flavorant, have a surface providing for the substantially laminar flow of smoke and permit the passage of none or a minority of the smoke drawn through the filter.

Schardt/F&N/Storella

12-20-90	Filed in PTO; assignment recorded.
5-31-91	IDS filed.
7-11-91	FF recommendations to Houghton.
7-15-91	1st action (response due October 15).
8-28-91	Draft response received.

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PM 1263 (DIV of PM 1263A) - SN 573991

METHOD AND APPARATUS FOR FORMING CONTAINERS WITH ROUNDED EDGES, AND CONTAINER BLANK FOR SAME (CORINTHIAN)

C. J. Campbell, Linda S. Latif, and H. Graboyes
Cigarette Technology

To produce a container with a rounded edge, the container blank is scored with several parallel, laterally spaced score lines adjacent the intended location of the rounded edge. When the blank is bent, a portion of the total deflection is absorbed by each score line so that the resulting container edge is a gradual curve rather than a single sharp crease. The ends of each scored region may be left unscored to further smooth the ends of the rounded contained edge. Methods and apparatus for forming the above-described blank are disclosed.

Glenn/F&N/Laughon

8-28-90	Filed in PTO.
7-29-91	Notice of allowance (fee due October 29 - Jackson will pay).

Corresponding foreign application filed in Japan, Korea, and the EPO designating Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, UK, Italy, Luxembourg, Netherlands, and Sweden.

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2020110319

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1263B (DIV of PM 1263A) - SN 547562

METHOD AND APPARATUS FOR FORMING CONTAINERS WITH ROUNDED EDGES

C. Campbell, H. Graboyes, L. Latif

Relates to a method and apparatus for forming containers with curved or rounded edges.

Glenn/F&N/Laughon

7-2-90	Filed in PTO.
5-16-91	Notice of allowance.
8-5-91	Issue fee paid.

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20201110320

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1268 - SN 122760

(Project Art) PROCESS AND APPARATUS FOR THE SEMICONTINUOUS EXTRACTION OF NICOTINE FROM TOBACCO

R. Prasad and H. Grubbs
Tobacco Materials/Chemical Research

A process is provided for the improved removal of nicotine from tobacco. A nicotine-free solvent in the supercritical state is fed into a first end of an extraction system containing tobacco and a nicotine-rich solvent is discharged from a second end of the extraction system. Periodically a portion of extracted tobacco is discharged from the first end of the extraction system while simultaneously a portion of an unextracted tobacco is charged to the second end of the extraction system.

See also PM 1267 and 1355

Schardt/F&N/Secrest/Sonnenfeld

11-19-87	Filed in PTO; assignment recorded.
6-28-88	Information disclosure statement filed.
1-30-89	1st action.
6-30-89	Amendment filed.
9-13-89	Revised draft amendment received--meeting with Sonnenfeld and inventors to review scope of application.
10-31-89	Supplemental amendment filed.
10-27-89	2nd action.
11-3-90	Response filed.
1-19-90	3rd action allowing all claims.
3-1-90	Amendment filed.
6-20-90	Examiner communication suspending prosecution for 3 months pending availability of pertinent reference.
6-22-90	Supplemental IDS filed.
9-20-90	Status inquiry filed.
10-25-90	Meeting with Krasnow/inventors.
12-20-90	4th action.
3-19-91	Response filed.

Corresonding foreign applications filed in Argentina, Australia, Brazil, Canada, Finland, Japan, South Africa, and EPO designating Austria, Belgium, Switzerland, Germany, Spain, France, UK, Greece, Italy, Netherlands, and Sweden.

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20201110321

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1269 - SN 100694

SMOKING COMPOSITIONS CONTAINING A HETEROAROMATIC FLAVORANT-RELEASE ADDITIVE

Yoram Houminer, Henry Secor and Jeff Seeman
Chemical Research

This invention provides smoking compositions which contain a novel heteroaromatic flavorant-release additive. Under typical cigarette smoking conditions, 2-isopropylpyrazine and acetophenone are released as pyrolysis products, and enhance the flavor and aroma of the mainstream and sidestream smoke.

Schardt/D&O

9-24-87	Filed in PTO.
3-26-91	Notice of allowance.
6-6-91	IDS filed.
6-25-91	Issue fee paid.

Corresponding foreign patents/applications in: Australia, Brazil, Canada, Japan, and EPO designating all countries

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20201110322

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1279 - SN 246768

(Bonded Ends) DROPLET JET APPLICATION OF ADHESIVE TO CIGARETTE ENDS

R. Gaudlitz, J. Washington, and H. McCafferty
Development Engineering

A method and apparatus are provided for applying an adhesive solution to the coal end of a cigarette by means of a precisely controlled liquid jet spray to bond shreds of tobacco in the cigarette end and to thereby reduce the amount of tobacco which falls out of the cigarette when shaken. The adhesive solution is sprayed by using a controlled continuous jet of the kind used in ink jet technology for the spraying of alpha-numeric character patterns. Electronic controls are employed to synchronize the formation of a series of droplets which are charged and deflected in prescribed paths to contact the coal end of the cigarette in a predetermined pattern. Circuits are provided to adjust the timing and phase of the charging mechanism to compensate for variations in the speed at which the cigarette is conveyed to a target area and for variations in the point of droplet formation.

See also CIP PM 1392

Schardt/F&N/Kennard

9-20-88	Filed in PTO; assignment recorded.
10-1-90	Notice of allowance.
12-13-90	Issue fee paid.

No corresponding foreign applications filed.

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20201110323

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1283 - SN 585813

(Filter Technology - Project Sauna) FILTER CIGARETTE

R. W. Newsome, A. S. Gergely, R. A. Thesing, W. T. Callaham, P. N. Gauvin, W. E. Claflin, and W. A. Nichols
Cigarette Technology

A filter cigarette comprising a tobacco rod and filter portion comprising a fluted tubular extrusion. The flutes are blocked intermediate the rod end and mouth end of the extrusion. The tobacco rod is circumferentially wrapped with a porous wrapper comprising a longitudinal band of perforations. The fluted tubular extrusion is attached with tipping paper to the tobacco rod. A mouthband and a rodband of perforations circumscribe the tipping paper. A rod of charcoal-impregnated filter material may abut the tubular extrusion.

Glenn/F&N/Horowitz

9-20-90	Filed in PTO; assignment recorded.
4-22-91	IDS filed.
4-26-91	1st action.
7-22-91	Amendment filed.
8-27-91	Notice of allowance (fee due November 27).

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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20201110324

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1287 - SN 460361

(Manufacturing) METHOD AND APPARATUS FOR DETIPPING LOOSE CIGARETTES

Michael A. Grove and Richard Thatcher
Engineering/

The method and apparatus of this invention relates to detipping cigarettes at high speed without degradation of the tobacco in the tobacco rod. Cigarettes are fed onto a conveyor belt so that they are traveling in a direction perpendicular to their longitudinal axis. a rolling belt disposed above the conveyor belt straightens bent cigarettes and rolls uneven cigarettes. The cigarettes are then fed onto a fluted rotating drum and aligned on the drum by means of an optical sensor and an air jet so that the filter tip portion of each cigarette is adjacent either side of the drum. Rotating knives are properly oriented so they engage the cigarettes only at the point where the filter tip is connected to the tobacco rod and cut off the filters of the cigarettes.

Schardt/F&N/Ingerman

1-3-90	Filed in PTO with IDS; assignment recorded.
8-12-91	Notice of allowance.
10-15-91	Issue fee paid.

Corresponding foreign applications filed in Japan, Korea, and the EPO designating Germany, Italy, and the UK.

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PM 1298 - SN 491500 ***** ISSUED *****

(Manufacturing) HORIZONTAL BELT CONVEYOR AIRLOCK

Michael J. Abel
Engineering

An airlock for the batch or continuous feeding of a material while obstructing the free flow of a gas. The airlock comprises a continuous belt having a substantially horizontal upper surface and a plurality of nonporous flights projecting out from the belt. Each flight has a free edge located outwardly from the belt. A planar sealing surface is located above and parallel to the belt, and seals against the free edges of the flights. Particulates are transported on the upper surface of belt below and away from any potential grinding action between the moving edges of the flights and the stationary sealing surface. The flights, located between the sealing surface and the belt, inhibit the flow of air through the airlock.

Schardt/F&N/Hintz

3-12-90	Filed in PTO; assignment recorded.
9-17-91	Issued: 5049007

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20201110325

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1301 CONT - SN 617395

IMPROVED PINNED ROLLERS AND PROCESSES FOR MANUFACTURING FIBRILLATED FILMS

M. Hill
FML/TTG/O'Brien

A roller for use in fibrillating oriented films of polyolefin materials having a plurality of pins projecting from the surface of the roller.

Schardt/F&N/Isackson

11-20-90	Filed in PTO.
2-1-91	1st action.
5-30-91	Response filed.

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PM 1307 DIV - SN 665968

CRIMPED TEXTILE FIBERS AND STUFFER BOX APPARATUS AND METHODS FOR CRIMPING TEXTILE FIBERS

M. Hill and W. A. Nichols
FML/

An improved stuffer box used for crimping textile fibers, particularly fibrillated polyolefin films. The width of the stuffer box is related to the linear density of the fiber bundles to be crimped whereby there is one millemeter of width for each fiber bundle size in the range of from abouot 200 to about 750 denier. Pressure controlled hinged lid or fixed lid exit orifices may be employed. Also employed may be a distributing device for applying additive material to the textile fibers prior to crimping to enhance the crimping operation or to enhance the end use of the crimped fiber or both. Fibrillated polyolefin materials that are crimped in accordance with the invention are adapted for use in filter materials in smoking articles.

Schardt/F&N/Matthews/Ingerman

3-7-91	Divisional filed in PTO directed to claims 18-20 drawn to a crimped textile fiber.
9-17-91	Reassigned to Matthews.
9-20-91	Preliminary amendment filed.

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20201110326

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1315 - SN 222961

(Delta - not used) SMOKING ARTICLE INCORPORATING A CERAMIC TUBE (DELTA)

C. Hayward, H. Lanzillotti, D. E. Merrill, E. B. Sanders, D. B. Losee, and J. Hearn

A smoking article in which a flavored aerosol is generated by heat transfer to a flavor bed from the combustion of a carbon heat source is provided wherein the carbon heat source and the flavor bed are contained within a non-combustible substantially cylindrical hollow ceramic sleeve. The article generates substantially no smoke, producing essentially only carbon dioxide, and has substantially no sidestream. The transfer of heat from the heat source is accomplished by convective and radiative heat transfer.

Schardt/F&N/Ingerman

7-22-88	Filed in PTO via Express Mail without formal papers.
7-3-90	Notice of allowance
9-10-90	Issue fee paid.

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PM 1319 - SN 223232

(Delta) CARBON HEAT SOURCE

William A. Nystrom, Leo C. Lanzel, Harry V. Lanzillotti, Charles R. Hayward, A. Clifton Lilly, and John R. Hearn

A carbonaceous heat source for a smoking article is provided. The heat source is designed to maximize heat transfer to a flavor bed in the smoking article. The heat source undergoes complete combustion without leaving residual ash, has a low degree of thermal conductivity and ignites within two seconds when it is subjected to a high intensity light and a 35 cc puff is taken on the smoking article.

Schardt/F&N/Ingerman

7-22-88	Filed in PTO via Express Mail without formal papers.
5-21-91	Notice of allowance.
5-31-91	Formal drawings submitted.
7-22-91	Issue fee paid.

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20201103 27

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1322 CIP II - SN 571730

(Delta/Sigma) SMOKING ARTICLE

M. A. Serrano, K. S. Houghton, H. V. Lanzillotti, E. B. Sanders, A. C. Lilly, C. R. Hayward, J. R. Hearn, and D. B. Losee

A smoking article in which a flavored aerosol is generated by heat transfer to a flavor bed from the combustion of a carbon heat source is provided. The article generates substantially no sidestream smoke. The transfer of heat from the heat source to the flavor bed is accomplished by convective and radiative heat transfer.

Schardt/F&N/Ingerman

8-24-90	Filed in PTO with IDS; assignment recorded.
5-31-91	Supplemental IDS filed.

Corresponding foreign applications filed in Australia, Brazil, Canada, China, Finland, Japan, New Zealand, Norway, Taiwan, Thailand, USSR, and EPO designating all countries except Luxembourg.

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PM 1325 - SN 266161

SMOKING COMPOSITIONS CONTAINING A HEXAHYDROBENZOFURANONE FLAVORANT

K. F. Podraza
Chemical Research

This invention provides smoking compositions which contain a 6-substituted hexahydrobenzofuranone flavorant additive. Under cigarette smoking conditions the flavorant additive enhances the aroma and flavor of the cigarette smoke.

Schardt/Depaoli

11-2-88	Filed in PTO.
10-27-89	1st action allowing claims 1-9 and 12-15 and rejecting 10-11.
11-29-89	Response filed.
6-3-91	Checked status with examiner--he expects to wrap this up next week.
8-15-91	Status inquiry sent to Depaoli.
10-2-91	Notice of allowability.

No corresponding applications/patents.

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2020110328

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1326 DIV - SN 700757

(Sigma) METAL CARBIDE HEAT SOURCE

Donald M. Schleich and Yunchang Zhang
Polytechnic Institute of NY

A metal carbide heat source, particularly useful in smoking articles, is provided. The metal carbide particles making up the heata source have ignition temperatures that are substantially lower than conventional carbon particles normally used in carbonaceous heat sources, while at the same time provide sufficient heat to release a flavored aerosol from a flavor bed for inhalation by the smoker. Upon combustion the heat source produces substantially no carbon monoxide.

Schardt/F&N/Loring
5-15-91 Filed in PTO.

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20020110329

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1327 - SN 509167

HOT ROTARY STAMPER APPARATUS AND METHODS FOR METAL LEAF STAMPING

Angel Amendola
Alford Packaging

A continuous sheet of metal leaf advanced at a constant rate is moved at variable velocity through a rotary die stamper such that between stamps the metal leaf moves at a velocity which is slower than the velocity of a substrate web; but just prior to stamping the metal leaf is accelerated by contact between the metal leaf and a raised die rotating at the velocity of the substrate web so that when the stamp occurs the metal leaf is traveling at a velocity substantially equal to the velocity of the substrate web. Varying the velocity of the metal leaf has the effect of minimizing the distance the metal leaf travels between stamps which conserves consumption of the metal leaf. Separate means for accelerating the leaf prior to stamping and decelerating the leaf after stamping also may be provided.

Schardt/F&N/Isackson/Hubbard

4-16-90	Filed in PTO; assignment recorded.
3-18-91	1st action rejecting all claims.
9-13-91	Response, formal drawings, and supplemental IDS filed.

Corresponding foreign applications filed in Australia, Brazil, Canada, Japan, South Korea and the EPO designating all countries except Luxembourg.

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20201110330

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1328 DIV - SN 508227

CONTAINER WRAPPER WITH INTEGRAL TEAR TAPE, AND METHODS AND APPARATUS FOR MAKING SAME

Angel Amendola (Alford Packaging) and Xuan M. Pham

An outer wrapper for a container which includes an integral tear tape. The tear tape is formed by cutting two sets of score lines extending partially through the thickness of the wrapper material. The tear tape can be patterned to conform to the parting line along which the container opens, including oblique segments, thus allowing the container to be opened without interference from the parts of the wrapper which remain in contact with the container subsequent to removal of the tear tape.

Schardt/F&N/Horowitz

4-12-90	Filed in PTO with preliminary amendment.
8-2-90	IDS filed.
10-5-90	1st action rejecting all claims.
12-19-90	Assignment recorded.
3-5-91	Response filed.
4-29-91	2nd action.
9-9-91	Reassigned to Horowitz.
9-30-91	Amendment filed.

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20201103331

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1331 - SN 381762

(Delta/Sigma) THERMAL INDICATORS FOR SMOKING ARTICLES

F. M. Sprinkel, J. M. Campbell, and D. B. Losee
Physical Research

Thermal indicators for non-combustion smoking articles which chemically react when heated to provide visual indication of temperature changes. The indicators comprise organic acids, sugars, or amines combined with sugars. The indicators are printed in a variety of patterns along the length of the smoking articles to show temperature changes and to indicate whether the smoking article is finished and should be discarded. Methods for applying the indicators to smoking articles by using print wheels or spray jets are also disclosed.

Schardt/F&N/deBlasi

7-18-89	Filed in PTO; assignment recorded.
9-25-90	Notice of allowance.
10-31-90	Issue fee paid.
3-14-91	Examiner called wanting to change "fluid" to "medium--we agreed.
8-30-91	Status inquiry.

Corresponding foreign applications filed in Japan and East Germany.

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20201110332

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1334 CONT - SN 634110

METHODS AND APPARATUS FOR OPTICALLY DETERMINING THE ACCEPTABILITY OF PRODUCTS

Kenneth A. Cox and Robert J. Maher

The appearance of a product is determined to be acceptable or unacceptable by computing a discriminant function or image from a plurality of two-dimensional images of products of the kind to be inspected. A two-dimensional image of the product is then formed and processed using the discriminant image to produce an output value which can be compared to a predetermined value used in computing the discriminant image. If the output value deviates from the predetermined value by more than a predetermined amount, the product has been found to have an unacceptable appearance.

Glenn/F&N/Jackson

12-17-90	Filed in PTO; assignment recorded.
1-30-91	IDS filed.
6-11-91	1st action.
9-10-91	Amendment filed.

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PM 1334 CIP - SN 696004

METHODS AND APPARATUS FOR OPTICALLY DETERMINING THE ACCEPTABILITY OF PRODUCTS

K. A. Cox, H. M. Dante, and C. N. Harward, and R. J. Maher
Physical Research

Improvements in methods and apparatus for optically determining whether or not a product has an acceptable appearance.

Related to PM 1514 and 1523

Glenn/F&N/Jackson

5-6-91	Filed in PTO; assignment recorded.
6-19-91	IDS filed.

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20201110333

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1335 - SN 444569

(Beta) ELECTRICALLY POWERED LINEAR HEATING ELEMENT FOR A SMOKING DEVICE

S. C. Deevi and F. M. Sprinkel
Physical Research

A heating element for use within a smoking device which non-combustibly heats a flavorant-containing material within the smoking device to produce an aromatic aerosol or vapor, which the smoker may inhale. More particularly, an electrically powered heating element having a plurality of discrete resistive heating segments, only one of which is active at any given time. In a preferred embodiment the heating element is contained within the smoking device so that the individual heating segments of the element are adjacent to a flavorant-containing material. As each segment of the heating element is provided with power, the flavorant-containing material adjacent to that segment is non-combustibly heated. This heating causes the flavorant-containing material to produce a flavored, aromatic aerosol or vapor, which the use of the device may inhale.

See also 1337

Glenn/F&N/deBlasi

12-1-89	Filed in PTO.
7-29-91	Notice of allowance (fee due October 29).
9-3-91	Formal drawings submitted.
8-26-91	deBlasi instructed to pay issue fee.

Corresponding foreign applications filed in Australia, Canada, South Korea, Japan, Norway, Turkey, and the EPO designating all countries except Luxembourg.

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20201110334

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1336 - SN 639241

(Sigma) A METHOD FOR PRODUCING METAL CARBIDE HEAT SOURCES

S. C. Deevi, M. R. Hajaligol, and D. B. Losee
Physical Research

A heat source comprising metal carbides and a method for preparing the same using reducing/carbidizing atmosphere is provided. The metal carbides making up the heat source have ignition temperatures that are substantially lower than conventional carbon particles normally used in carbonaceous heat sources, while at the same time provide sufficient heat to release a flavored aerosol, from a flavor bed for inhalation by the smoker. Upon combustion, the heat source produces substantially no carbon monoxide.

Schardt/F&N/Hintz
1-9-91 Filed in PTO; assignment recorded.

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PM 1337 - SN 444746 *** ISSUED ***

(Beta) FLAVOR GENERATING ARTICLE (FLAVOR DOT - MULTIPLE AG BED)

M. E. Counts, B. C. LaRoy, D. B. Losee, C. H. Morgan, U. Smith, F. M. Sprinkel, F. V. Utsch
Physical Research

An article is provided in which a flavor generating medium is electrically heated to evolve inhale the flavors or other components in vapor or aerosol form. The article has a plurality of charges of the flavor generating medium which are heated sequentially to provide individual puffs.

See also 1335

12-1-89 Filed in PTO; assignment recorded.
10-29-91 Issued: 5060671

Corresponding foreign applications filed in Australia, Canada, Japan, South Korea, Turkey, Norway, and the EPO designating all countries except Luxembourg.

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2020110335

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1337 CONT - SN 741736

Glenn/F&N/Ingerman(Beta) FLAVOR GENERATING ARTICLE (FLAVOR DOT - MULTIPLE AG BED)

M. E. Counts, B. C. LaRoy, D. B. Losee, C. H. Morgan, U. Smith, F. M. Sprinkel, F. V. Utsch
Physical Research

An article is provided in which a flavor generating medium is electrically heated to evolve inhale the flavors or other components in vapor or aerosol form. The article has a plurality of charges of the flavor generating medium which are heated sequentially to provide individual puffs.

Glenn/F&N/Ingerman
8-7-91 Filed in PTO.
8-28-91 Preliminary amendment filed.

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PM 1338 - SN 385006

(Delta/Sigma) TUBE CUTTING AND FORMING APPARATUS (ROLLED END TUBE)

Jack C. Wheless, Billy J. Keen, and Renzer R. Ritt
Engineering

An apparatus for cutting and forming tubular members is disclosed. The tubular members are carried by a plurality of fluted drums from one operation to the next. The tubular members are cut to the desired size by a plurality of rotating circular knives. The ends of the tubular members are formed by one or more dies that are caused to move into contact with the ends of the tubular members.

Schardt/F&N/Panichi
7-25-89 Filed in PTO with IDS; assignment recorded.
5-8-91 Notice of allowance.
7-29-91 Issue fee paid.

Corresponding foreign applications filed in Japan, East Germany, and the EPO.

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2020110336

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1339 - SN 494598

(Sigma/Delta) APPARATUS FOR CUTTING THIN-WALLED TUBES

Josef A. Boukal, Mike Braunshteyn, Jack C. Wheless, and Kathleen S. Whittle
Engineering

An apparatus for precision cutting lightweight, thin-walled tubes that includes a means for transporting rough cut, thin-walled tubes from a source of supply past a first inspection station to determine if the tubes are crushed beyond a predetermined amount, a flaring station to flare the tube ends, an aligning station to align the tubes from cutting, and a cutting station to cut the tube into multiple sections. A selection means is provided that has second and third inspection means to determine if the tubes have been properly cut.

Schardt/F&N/Matthews

3-16-90	Filed in PTO.
9-21-90	F&N asked to review 1338 art in relationship to PM 1339.
5-10-91	IDS filed.
8-16-91	1st action (Matthews drafting response).

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PM 1340 - SN 494761

(Sigma/Delta) APPARATUS MAKING THIN LAMINATE STRUCTURES AND FORMING THE STRUCTURES INTO LIGHTWEIGHT, THIN-WALLED TUBES

Mike Braunshteyn, James E. Hall, Reginald W. Newsome, Jack C. Wheless, and Kathleen S. Whittle
Engineering

An apparatus for laminating at least two strips of strip material and forming the laminate into lightweight, thin-walled tubular members that may be used in the construction of non-combustion smoking articles.

Glenn/F&N/Panichi

3-16-90	Filed in PTO.
8-6-90	Assignment recorded.
3-29-91	Restriction requirement.
4-29-91	Response filed.
6-24-91	1st action rejecting all claims.
9-23-91	Response filed.

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2020110337

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1345 - SN 444818

(Beta) FLAVOR DELIVERY ARTICLE (SINGLE AG BED)

M. E. Counts, M. R. Hajaligol, C. H. Morgan, U. Smith, F. M. Sprinkel, F. V. Utsch,
Physical Research

Methods and apparatus for releasing flavor components from a flavor-generating medium using an electric heating element are provided. A non-combustion flavor-generating article uses electrical energy to power a heating element which heats tobacco or other flavorants. The flavor-generating medium is formed into a packed bed. Energy delivered to the heating element is regulated to maintain the flavor-generating medium at a relatively constant operating temperature to ensure a relatively constant release of flavor.

PM 1330, 1344, 1369 combined herewith

Glenn/F&N/Gulliano

12-1-89	Filed in PTO.
2-8-90	Preliminary amendment filed.
5-16-90	IDS filed.
12-20-90	1st action.
3-20-91	Response and supplemental IDS filed.
7-29-91	2nd action (response due October 29).
8-29-91	Action sent to Utsch for review.
10-2-91	Reassigned to Joseph Gulliano.

Corresponding foreign applications filed in Australia, Canada, Japan, South Korea, Norway, and the EPO designating all countries.

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2020110338

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1347 - SN 556732

(Sigma) CATALYTIC CONVERSION OF CARBON MONOXIDE FROM CARBONACEOUS HEAT SOURCES

S. C. Deevi, M. R. Hajaligol, D. S. Kellogg, and B. E. Waymack
Physical Research

This invention relates to an improved carbonaceous heat source, particularly useful in a smoking article, comprising a carbon component and a metal species. Upon combustion, the metal species acts as a catalyst to convert substantially all of the carbon monoxide produced on combustion of the carbon component to a benign substances.

Schardt/F&N/Gross

7-20-90	Filed in PTO; assignment recorded.
3-25-91	1st action received.
7-23-91	Response and IDS filed.

Corresponding foreign applications filed in Japan, South Korea, and EPO designating all countries except Luxembourg.

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PM 1350 DIV - SN 616197

CONTAINER FOR ADDITIVE MATERIALS FOR SMOKING ARTICLES

Gus D. Keritsis
Cigarette Technology

A container for containing an additive material for modifying the characteristics of a smoking article.

Schardt/F&N/Panichi

11-20-90	Filed in PTO.
6-17-91	Notice of allowance.
8-7-91	Supplemental IDS and formal drawings filed.
8-28-91	Issue fee paid.

Foreign applications corresponding to the parent case filed in Japan and the EPO designating all countries except Luxembourg.

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20201110339

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1350 DIV II- SN 759407

CONTAINER FOR ADDITIVE MATERIALS FOR SMOKING ARTICLES

Gus D. Keritsis
Cigarette Technology

A container for containing an additive material for modifying the characteristics of a smoking article.

Schardt/F&N/Panichi
9-13-91 Filed in PTO (covers claims 9-12).

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PM 1353 - SN 732619

(Sigma) MANUFACTURING OF COMPOSITE HEAT SOURCES CONTAINING CARBON AND METAL SPECIES

S. C. Deevi, M. R. Hajaligol, H. V. Lanzillotti, A. C. Lilly, D. B. Losee, and M. L. Watkins
Physical Research

Improved method for making a heat source comprising metal carbides are provided. the metal carbides heat sources have ignition temperatures that are substantially lower than conventional carbon particles normally used in carbonaceous heat sources, while at the same time provide sufficient heat to release a flavored aerosol, from a flavor bed for inhalation by the smoker. Upon combustion, the heat source produces substantially no carbon monoxide. The metal carbide is prepared by pre-forming the metal species/carbon source starting materials into a shape, and converting them to metal carbide in situ, without substantially altering the shape of the starting materials.

Schardt/F&N/Gross/Radulescu
7-19-91 Filed in PTO; assignment recorded.

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2020110340

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1360 - SN 699490

(Sigma) A COMPOSITE HEAT SOURCE COMPRISING METAL CARBIDE, METAL NITRIDE, AND METAL

S. C. Deevi, S. Deevi, M. R. Hajaligol, K. H. Houghton
Physical Research

Relates to heat sources comprising mixtures of metal carbide, metal nitride and metal. Upon combustion, the heat sources undergo a staged ignition process.

Schardt/F&N/Gross/Radulescu
5-13-91 Filed in PTO via Express Mail.
7-15-91 Assignment recorded.

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PM 1365 - SN 365137

(Paper Technology) MULTIPLE LAYER CIGARETTE PAPER FOR REDUCING SIDESTREAM SMOKE

The sidestream smoke associated with a cigarette or cigarette-like smoking article is reduced by wrapping the tobacco in a single sheet or paper having multiple layers.

S. D. Baldwin, R. M. Rogers, G. H. Bokelman, S. S. Tafur
Chemical Research

Schardt/F&N/Miraglia
6-12-89 Filed in PTO; assignment recorded.
3-2-90 1st action allowing 4-10, rejecting 1, and objecting to 2-3.
9-23-91 Response filed.

Corresponding foreign applications filed in Japan, South Korea, Portugal, Turkey, South Africa, East Germany, Norway, Finland, and the EPO designating all countries.

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2020110341

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1370 - SN 567020

CONDITIONING CYLINDER WITH FLIGHTS, BACKMIXING BAFFLES, CONDITIONING NOZZLES AND AIR RECIRCULATION

John C. Strang and Steve G. Muller
Engineering

An apparatus and method for conditioning tobacco or other similar materials. In the preferred embodiment, a conditioning cylinder comprises a plurality of flights, backmixing baffles, and ejection baffles, all mounted to the interior wall of a cylinder. Rotation of the cylinder mixes and conveys the material. A spray nozzle assembly is positioned adjacent to the entrance of the cylinder and comprises spray nozzles. The spray nozzles are aimed at a plurality of predetermined target areas within the cylinder for directing a conditioning spray onto the material in the target areas. A recirculation conduit recirculates air exiting the cylinder and, before reentering the cylinder, combines the recirculated air with ambient air from fresh air make-up ports.

Glenn/F&N/A. Smith
8-14-90 Filed in PTO; assignment recorded.
9-10-91 Notice of allowance (fee due December 10--Smith will pay).

Corresponding foreign applications files in Australia, Brazil, Turkey and the EPO designating all countries except Luxembourg.

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2020110342

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1372 - SN 557123

SCINTILLATION TUBE DYNAMIC CALIBRATION MONITOR AND FEEDBACK REGULATOR

David E. Sharpe
Engineering

A scintillation tube dynamic calibration monitor and means for regulating the high voltage power supply to the detector are provided. In a preferred embodiment, a voltage boost current source provides an input voltage for a power out voltage regulator and for a +14.75 volt board regulator. The board regulator provides a voltage reference for various circuitry, and provides a voltage reference for coarse calibration and display calibration adjustment circuitry. The power voltage regulator provides the high voltage power supply drive signal. An error amplifier drives an integrator, which, in turn, drives a bargraph display. An optically-isolated output circuit drives an external alarm or relay. In an alternative embodiment, the pulse width of a detected circuit is linearized and converted to an analog control signal. The analog control signal drives conventional power supply control circuitry.

Schardt/F&N/Gulliano

7-23-90	Filed in PTO; assignment recorded.
10-31-90	IDS filed.
9-3-91	Formal drawings submitted.
10-2-91	Reassigned to Joseph Gulliano.

Corresponding foreign applications filed in Japan and EPO designating all countries except Luxembourg.

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20201103 43

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1375CONT - SN 688479

(Sigma/Delta) SPIRAL TUBE MAKING METHODS AND APPARATUS INCLUDING SPLICE REJECTION

Peter C. Van Davelaar (Jewett Automation)
Engineering

In apparatus for forming cut lengths of tube by winding one or more strips of material into a continuously advancing spiral wound tube and periodically cutting off lengths of the tube, lengths of tube containing splices present in the strips are rejected at a rejection point downstream from the cut-off point by monitoring the strips for splices prior to winding, waiting the time interval required for a splice to reach the rejection point, and rejecting the length of tube at the rejection point when the time interval has elapsed.

Schardt/F&N/Jackson

2-26-91	Jackson instructed to file Continuation.
4-22-91	Filed in PTO.
5-16-91	IDS filed.
7-16-91	1st action.
9-10-91	Response filed.

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20201110344

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1389 - SN 443636

(Delta/Sigma) CHEMICAL HEAT SOURCE COMPRISING METAL NITRIDE, METAL OXIDE, AND CARBON

M. R. Hajaligol, S. C. Deevi, S. D. Ariprala, D. B. Losee, B. E. Waymack, and M. L. Watkins
Physical Research

A chemical heat source comprising meatl nitride, metal oxide and carbon, particularly useful in smoking articles, and methods of making the heat source are provided. The metal nitride of the heat source has an ignition temperature substantially lower than conventional carbonaceous heat sources, while at the same time provides sufficient heat to release a flavored aerosol from a flavor bed for inhalation by the smoker. Upon combustion the heat source produces virtually no carbon monoxide. The metal nitride is prepared by pre-forming the starting materials into a desired shape, and converting them to metal nitride in situ, without substantially altering the shape of the starting materials.

Schardt/F&N/Gross
11-29-89 Filed in PTO.

Corresponding foreign applications filed in Japan, South Korea, and the EPO designating all countries except Luxembourg.

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20201110345

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1392 (CIP of PM 1279) - SN 731632

(Bonded Ends) DROPLET JET APPLICATION OF ADHESIVE OR FLAVORING SOLUTIONS TO CIGARETTE ENDS

Robert T. Gaudlitz, Hugh J. McCafferty, and J. M. Washington
Development Engineering

A method and apparatus are provided for applying an adhesive or flavoring solution to the coal end of a cigarette by means of a precisely controlled liquid jet spray to bond shreds of tobacco in the cigarette end and to thereby reduce the amount of tobacco which falls out of the cigarette when shaken. Electronic controls are employed to synchronize the formation and charging of a series of droplets which are deflected in prescribed paths to contact the coal end of the cigarette in a predetermined pattern. Circuits are provided to adjust the timing and phase of the charging mechanism to compensate for variations in the speed at which the cigarette is conveyed to a target area and for variations in the timing of droplet formation.,

Schardt/F&N/Godziela
4-19-91 Letter to C. Smith: look into inventorship question raised by B. Fischer.
7-17-91 Filed in PTO.

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2020110346

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1393 - SN 429317

(Paper Technology) WRAPPER FOR SMOKING ARTICLE (KH_2PO_4 - SIDESTREAM REDUCTION)

G. H. Bokelman, S. D. Baldwin, S. Tafur, R. N. Ferguson, B. L. Goodman, and R. M. Rogers
Chemical Research/Cigarette Technology

The sidestream smoke associated with a cigarette or cigarette-like smoking article is reduced by wrapping the tobacco in a paper wrapper having a burn retardant added thereto.

See also PM 1466

Glenn/F&N/Miraglia

10-31-89	Filed in PTO; assignment recorded.
1-3-89	In-house search results forwarded to Lee.
1-12-90	Information disclosure statement filed.
3-15-90	Memo from Bokelman with information for potential CIP--copy forwarded to Lee.
5-9-90	Meeting with Lee/Bokelman/Baldwin to review data for CIP.
8-3-90	1st action.
9-5-90	Meeting with inventors/Lee--will contest 102 rejection on basis that claim 13 recites acidic.
10-24-90	Response filed.
12-20-90	2nd action.
4-19-91	Response filed.
7-29-91	3rd action.
9-27-91	Response filed.

Corresponding foreign applications filed in Japan, South Korea, Portugal, Turkey, South Africa, East Germany, Norway, Finland, and EPO designating all countries.

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2020110347

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1396 (D554) - SN 700402

NOVEL ORGANIC ACIDS (LIQUID ION EXCHANGERS)

R. N. Ferguson, C. R. Howe, H. V. Secor, and J. Seeman
Chemical Research

In a preferred embodiment this invention provides novel organic acids which exhibit utility as liquid ion exchangers suitable for use in solvent extraction.

Schardt/Depaoli
5-15-91 Filed in PTO; assignment recorded.

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PM 1398 - SN 613013

(Sigma/Delta) SMOKING COMPOSITIONS CONTAINING A MENTHOL-RELEASE ADDITIVE

W. Geoffrey Chan
Chemical Research

In one embodiment, this invention provides a smoking compotision which contains a flavorant additive which releases menthol under normal cigarette smoking conditions. The menthol-release additive is a mixture of menthyloxycarbonylglucose compounds which include more than 35 mole percent of 1-0-menthyloxycarbonyl-beta-d-glucopyranose and more than about 20 mole percent of 1,6-di-0-menthyloxycarbonyl-beta-d-glucopyranose.

Schardt/Depaoli/Giancola
11-15-90 Filed in PTO; assignment recorded.

Corresponding foreign applications filed in Australia, Canada, Japan, and the EPO designating all countries except Luxembourg.

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2020110348

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1399 - SN 765311

SMOKING COMPOSITIONS CONTAINING AN OXALATE FLAVORANT-RELEASE ADDITIVE

W. Geoffrey Chan
Chemical Research

In one embodiment this invention provides smoking compositions which contain a novel oxalate ester flavorant-release additive. Under cigarette smoking conditions, a combustible filler additive such as methyl 4-oxo-β-ionyl oxalate pyrolyzes and releases megastigma-5,7,9-trien-4-one as a natural flavorant component of the cigarette smoke.

Schardt/Depaoli

9-25-91	Filed in PTO.

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PM 1400 - SN 496584

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A FLAVORANT ADDITIVE

Kenneth F. Podraza
Chemical Research

In one of its embodiments this invention provides smoking compositions which contain a benzofuranone flavorant additive as illustrated by cis 6-phenyl-3a,4,5,7a-tetrahydro-2(3H)-benzofuranone. Under normal cigarette smoking conditions, the benzofuranone additive volatilizes and enhances the flavor and aroma of the mainstream and sidestream smoke.

Schardt/Depaoli

3-21-90	Filed in PTO; assignment recorded.
12-20-90	1st action.
1-3-91	Response filed.
4-26-91	2nd action.
5-9-91	Response filed.
8-26-91	3rd action.
8-29-91	Response filed.

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20201110349

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1401 (D548) - SN 660881

(Ambrosia) SMOKING COMPOSITIONS CONTAINING AN ALDEHYDE-RELEASE SACCHARIDE ADDITIVE

W. Geoffrey Chan
Chemical Research

This invention provides smoking compositions which contain a novel flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as 4'-formyl-2'-methoxyphenyl 4,6-0-cinnamylidene)-β-D-glucopyranoside pyrolyzes into cinnamaldehyde and vanillin flavorants as volatile components of the cigarette smoke.

Schardt/Depaoli/Giancola
2-26-91 Filed in PTO; assignment recorded.

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PM 1402 - SN 428926 *** ISSUED ***

METHODS AND APPARATUS FOR OPTICAL PRODUCT INSPECTION

David Casasent
Carnegie Mellon

Lines of text (e.g., printing on a product) are verified by forming a one-dimensional image of each line substantially parallel to its length. This one-dimensional image information is compared to corresponding information for the intended lines of text. This comparison is preferably done using acousto-optic correlator systems. Space and frequency multiplexing may be used to allow parallel processing of several lines of text and/or to allow comparisons with multiple references to be made simultaneously. The invention may be used to determine the acceptability of products based on the correctness of the text image, and to reject products on which the correct text does not appear.

Schardt/F&N/Jackson
10-30-89 Filed in PTO; assignment recorded.
10-29-91 Issued: 5061063.

Corresponding foreign applications filed in Australia, Brazil, Japan, South Korea, Turkey, and the EPO designating all countries.

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20201110350

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1404 - SN 550177

STRING DOFFER MECHANISM

George S. Bosell, Joao C. A. Gomes, and Joseph P. Maciejczyk
Engineering

A mechanism for removal of contaminants from a stream of material having a plurality of rotatable cylindrical doffer elements each having flights supplied with cleaning means thereon mounted substantially parallel to one another within a frame. The mechanism is provided with means for adjusting both the positions along the frame of the doffer elements as well as the vertical elevation of the doffer elements with respect to the frame.

Glenn/F&N/Panichi

7-9-90	Filed in PTO.
9-10-90	Assignment recorded.
10-3-90	IDS filed.
3-18-91	1st action.
6-13-91	Draft response approved.
10-17-91	Panichi asked to confirm response has been filed.

Corresponding foreign applications filed in Argentina, Brazil, Japan, South Korea, Turkey and the EPO designating all countries except Luxembourg.

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2020110351

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1406 (D546) - SN 710324

METHOD AND APPARATUS FOR DISPENSING A CONSTANT CONTROLLED VOLUME OF ADHESIVE

B. C. Kiernan, B. A. Semp, D. M. Driscoll, and D. L. Bilunas
Engineering

Relates to controlling adhesive flow through a nozzle such that a consistent, continuously controlled volume of adhesive is dispensed on a moving substrate independent of other system and environmental parameters.

Glenn/F&N/Krasnow
6-4-91 Filed in PTO with IDS; assignment recorded.

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PM 1410 - SN 600437

AUTOMATED BOX BLANK HANDLING SYSTEM

D. Brookman, E. Grollimund, G. Grollimund, and S. F. Spiers
Engineering

A system is provided for packing, shipping and automated unloading of stacks of box blanks so as to minimize damage to the box blanks and facilitate the insertion of the box blanks into an automated packaging machine. A fitted shipping case, filled with stacks of box blanks and upper and lower inserts, has a plurality of holes in its upper and lower flaps for cooperating with an automated unloading machine. The inserts enclosed in the shipping case minimize damage due to shifting of the box blank stacks, provide added resistance against case failure during transit, and cooperate with the automated unloading machine to facilitate removal of the box blank stacks from the shipping case. The automated shipping case unloading machine features a stationary case gripping portion, an upper portion for opening the shipping case and removing the upper insert, and a plurality of carriage assemblies for lifting the stacks of box blanks out of the shipping case and conveniently presenting the stacks to the human operator.

Glenn/F&N/Pisano
10-19-90 Filed in PTO; assignment recorded.
6-20-91 Notice of allowance.
9-16-91 Issue fee paid.

Corresponding foreign applications filed in Japan and the EPO designating all countries except Luxembourg.

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20201110352

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1410 DIV - SN _____

AUTOMATED BOX BLANK HANDLING SYSTEM

D. Brookman, E. Grollimund, G. Grollimund, and S. F. Spiers
Engineering

A system is provided for packing, shipping and automated unloading of stacks of box blanks so as to minimize damage to the box blanks and facilitate the insertion of the box blanks into an automated packaging machine. A fitted shipping case, filled with stacks of box blanks and upper and lower inserts, has a plurality of holes in its upper and lower flaps for cooperating with an automated unloading machine. The inserts enclosed in the shipping case minimize damage due to shifting of the box blank stacks, provide added resistance against case failure during transit, and cooperate with the automated unloading machine to facilitate removal of the box blank stacks from the shipping case. The automated shipping case unloading machine features a stationary case gripping portion, an upper portion for opening the shipping case and removing the upper insert, and a plurality of carriage assemblies for lifting the stacks of box blanks out of the shipping case and conveniently presenting the stacks to the human operator.

Glenn/F&N/Pisano
9-6-91 F&N instructed to file DIV on claims 1-5.

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PM 1412 - SN 613160

PUTRESCINE N-METHYLTRANSFERASE, RECOMBINANT DNA MOLECULES, ENCODING PUTRESCINE N-METHYLTRANSFERASE, AND TRANSGENIC TOBACCO PLANTS WITH ALTERED NICOTINE CONTENT

H. Y. Nakatani and V. S. Malik
Biochemical Research

There is provided highly purified tobacco putrescine N-methyltransferase, a process for its purification, and production of PMT DNA sequence. The purification process includes the step of applying a tobacco root extract to an anion exchange medium and specifically eluting putrescine N-methyltransferase with an elution buffer comprising putrescine.

Glenn/F&N/Creason
11-14-90 Filed in PTO.
1-28-91 Assignment recorded.

Corresponding foreign applications filed in Brazil, Japan, Turkey, and the EPO designating all countries except Luxembourg.

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20201110353

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1413 (D539, D569, D643, D644) - SN _____

THERMALLY-REGULATED FLAVOR GENERATOR

S. C. Deevi, M. R. Hajalicol, C. H. Morgan, W. A. Nichols
Tobacco Fundamentals

Relates to a smoking article in which the delivery of flavor to the consumer during each individual puff of the article can be precisely controlled and regulated. As a result, the smoking article is capable of producing a constant quality of flavor delivery from the first to last puff of the article.

Schardt/F&N/Gross/Radulescu
9-10-91 Filed in PTO.

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PM 1418 - SN 565127

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE ADDITIVE

Y. Houminer, K. Podraza, and E. Southwick
Chemical Research

This invention provides smoking compositions which contain a novel vanillyl 5-hydroxyester flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as 4'-formyl-2'-methoxyphenyl 5-hydroxy-2-isopropylhexanoate pyrolyzes into vanillin and 2-isopropyl-5-hydroxyhexanoic acid delta lactone flavorants as volatile components of the cigarette smoke.

Schardt/Depaoli
8-10-90 Filed in PTO; assignment recorded.

Corresponding foreign patents/applications in Canada, Japan, and the EPO designating all countries except Luxembourg.

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2020110354

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1419 - SN 537775

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE BETA-HYDROXYESTER ADDITIVE

G. Chan, Y. Houminer, J. Paine, and K. Podraza,
Chemical Research

This invention provides smoking compositions which contain a novel beta-hydroxyester flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as ethyl 3-hydroxy-3-(4'-hydroxy-3'-methoxyphenyl)-2-phenylpropanoate pyrolyzes into vanillin and ethyl phenylacetate flavorants as volatile components of the cigarette smoke.

See also PM 1464

Schardt/Depaoli
6-13-90 Filed in PTO.
4-26-91 1st action.
5-15-91 Response filed.
8-26-91 2nd action.
9-12-91 Response filed.

Corresponding foreign patents/applications in Canada, Japan, and the EPO designating all countries except Luxembourg.

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PM 1420DES - SN 627966

(Ambrosia) ODORLESS ASHTRAY

R. W. Newsome
Cigarette Technology

Design for an odorless ashtray.

Glenn/F&N/Solomon
12-17-90 Filed in PTO.

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20201110355

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1421 - SN 493720 *** ISSUED ***

(Sigma/Delta) SPIRAL TUBE WINDING METHODS AND APPARATUS INCLUDING PLY BREAK SENSING
Peter Van Davelaar (Jewett)

In a spiral tube winder, the plies going to the winding mechanism are monitored to make sure that no ply is broken. If any ply breaks, the machine is stopped so that the broken ply does not become entangled in the apparatus, especially in the glue applying portion of the apparatus. The ply break detection system is automatically activated for each ply lane that is in use so that plies can be added while the machine is in operation, with the result that the ply break protection for each such added ply comes on automatically after that ply has been added.

Related to PM 1343, 1375, and 1417

Schardt/F&N/Jackson
3-15-90 Filed in PTO; assignment recorded.
10-22-91 Issued: 5059164

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PM 1425 (D592) - SN 723164

(Manufacturing) RESTRUCTURED TOBACCO DRYER

John N. Hickle
Engineering

Apparatus and method in which reconstituted tobacco sheet is produced by applying a tobacco containing slurry to a heated cylindrical dryer.

Glenn/F&N/Brook
6-28-91 Filed in PTO.

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2020410356

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1426 - SN 679756

(Manufacturing) UNIVERSAL MATERIAL CARRIER AND OVERHEAD MONORAIL SYSTEM

Gary E. Grollimund and Hannes K. Junginger
Engineering

Apparatus and method for transporting a variety of cigarette and packaging components to the manufacturing and packaging areas of a cigarette manufacturing and packaging operstion.

Glenn/F&N/Brook
4-3-91 Filed in PTO.

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PM 1427 (D595) - SN 746746

(Manufacturing) TRASH REMOVAL APPARATUS AND METHOD

R. A. Arents and Everett C. Patterson
Engineering

Apparatus and method for separating loose shreds of tobacco and large and small trash from rejected cigarettes.

Schardt/F&N/Brook
8-19-91 Filed in PTO.

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20201110357

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1429 - SN 614620

(Paper Technology - Project Tomorrow - "Daubing Dandy") PAPER HAVING CROSSDIRECTIONAL REGIONS OF VARIABLE BASIS WEIGHT

J. Allen, G. H. Bokelman, N. Gautam, D. Kraske, J. L. Myracle, R. M. Rogers, and E. B. Sanders

This invention refers to a paper having cross directional regions having increased basis weight. The paper of this invention is especially useful as a wrapping material for a smoking article. The paper may be produced by depositing additional material onto a moving base web in a papermaking machine. The additional material is deposited by means of a rotating drum containing a plurality of slits through which the additional material passes.

Glenn/F&N/Horowitz
11-16-90 Filed in PTO.
7-19-91 Preliminary amendment filed.

Corresponding foreign applications filed in Australia, Canada, Finland, Norway, Japan, and the EPO designating all countries except Luxembourg.

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20201110358

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1430 - SN 565126

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE ADDITIVE

R. Southwick
Chemical Research

This invention provides smoking compositions which contain a novel di-vanillyl ester flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as di-ethylvanillyl oxalate pyrolyzes and releases ethylvanillin as a volatile flavorant component of the cigarette smoke.

Schardt/Depaoli
8-10-90 Filed in PTO; assignment recorded.
7-29-91 1st action.
8-8-91 Amendment filed.

Corresponding foreign patent/applications in Canada, Japan, and the EPO designating all countries except Luxembourg.

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PM 1431 - SN _____

(Filter Technology/CO Removal) CONVERSION OF CARBON MONOXIDE USING MIXED TRANSITION METAL OXIDE CATALYSTS

R. L. Augustine and S. Tanielyan (Seton Hall)
Physical Research

This invention relates to improved catalysts for the oxidation of carbon monoxide and methods of preparing these catalysts. The catalysts of this invention are prepared using a sequential precipitation process which generates catalysts that contain substantially layered metal oxides, both supported and unsupported, and, in some embodiments of the invention, a noble metal or mixture of noble metals layered on the metal oxides. These catalysts are particularly useful in smoking articles.

Glenn/F&N/DeFranco/Loring
2-15-91 Filed in PTO.

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20201110359

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1432 - SN 568358

(Manufacturing/Cartier 10) PROCESS FOR PACKAGING CIGARETTES

J. Adams, J. D. Barnes, R. C. Donoff, H. H. Fishburne, V. L. Maclauchlan, X. M. Pham, L. L. Pitt, S. R. Rinehart, J. Tomanovits, and D. C. Wilder
Engineering

A process for efficiently packaging cigarettes into an oval pack having plastic end caps is provided.

Glenn/F&N/Matthews

8-15-90	Filed in PTO.
10-10-90	Preliminary amendment filed.
10-11-90	Assignment recorded.
3-14-91	1st action rejecting all claims.
7-10-91	Response filed.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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20201110360

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1435 - SN 567810

(Manufacturing/Cartier 10) METHOD WHERE EXPOSED FOIL ON TOP OF CIGARETTE BUNDLE IS FLAT WITH NO APPARENT FOLDS

John D. Barnes, Howard H. Fishburne, Xuan M. Pham, and Linwood L. Pitt
Engineering

A method of folding foil around cigarette bundles where the exposed foil on the top of the bundle is flat with no apparent folds. The smooth flat appearance is created by forming the top folds prior to forming the side folds. Notches cut into the foil by which folding stresses on the outermost cigarettes in the bundle are reduced are also provided.

Glenn/F&N/Panichi

8-15-90	Filed in PTO; assignment recorded.
12-13-90	IDS filed.
5-3-91	Restriction requirement.
7-24-91	1st action - final (response due October 24).

Corresponding foreign applications filed in Australia, Japan, South Korea and the EPO designating all countries except Luxembourg.

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20201110361

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1437 - SN 567808

(Manufacturing/Cartier 10) CIGARETTE BOX ENDCAP INSERTION METHOD AND APPARATUS

Vic Maclauchlan
Engineering

This disclosure is for a method and apparatus for inserting one or more endcaps into the ends of a cigarette box. The box is placed on a slide in the apparatus and the slide moves along a predetermined path through the apparatus. Along the path, the box is aligned and pushers push endcaps into the end of the cigarette box. A uniform box with a desirec cross-sectional shape is produced.

Glenn/F&N/Krasnow

8-15-90	Filed in PTO; assignment recorded.
7-31-91	1st action (response due October 31).
10-7-91	Draft response received.
10-14-91	Draft response sent to inventor for review.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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20201110362

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1438 - SN 567806

(Manufacturing/Cartier 10) METHOD AND APPARATUS FOR ULTRASONICALLY BONDING ENDCAPS TO A CONTAINER OF DISSIMILAR MATERIAL

Jonah Adams and Steve Rinehart
Engineering

A method and apparatus are provided for ultrasonically bonding endcaps to a food or tobacco product container comprised of a material dissimilar from the endcaps. Ultrasonic vibration is applied to the joint between the container and the endcaps, which includes a strip of preapplied adhesive, so that the adhesive partially melts. The partially melted adhesive quickly resolidifies, providing a durable bond without the disadvantageous and time consuming use of wet glues. The apparatus includes a pair of opposingly mounted ultrasonic devices, a controller associated with each ultrasonic device, and a general purpose computer programmed to synchronize and monitor the controllers.

Glenn/F&N/Pisano
8-15-90 Filed in PTO.
10-5-90 IDS filed.
8-13-91 Restriction requirement.
9-10-91 Response, IDS and formal drawings filed.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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PM 1442 (D605) - SN 688154

(Delta/Sigma) THERMALLY RELEASABLE GEL-BASED FLAVOR SOURCE FOR SMOKING ARTICLES

W. A. Nichols, P. D. Lieberman, and M. E. Toerne
Tobacco Fundamentals

A gel-based tobacco-containing thermally releasable flavor source that provides the sensations associated with the smoking of tobacco without the burning of tobacco.

Schardt/F&N/Gross/Radulescu
4-19-91 Filed in PTO; assignment recorded.

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2020110363

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1444 - SN 600423

(Paper Technology) WRAPPER FOR A SMOKING ARTICLE

G. H. Bokelman, J. A Fournier, A. G. Kallianos, J. B. Paine, K. F. Podraza, J. I. Seeman
Chemical Research

An improved smoking article wrapper which significantly reduces sidestream smoke using magnesium carbonate in the form of magnesite as a filler. Smoking articles which employ the wrappers exhibit a significant reduction in sidestream smoke without adverse effect on subjective characteristics.

See also PM 1494, 1441, 1466, and 1511

Glenn/F&N/Morris
10-19-90 Filed in PTO; assignment recorded.
6-4-91 New data supporting this application received from inventors.
9-10-91 Notice of allowance (fee due December 10--Morris will pay).

Corresponding foreign applications filed in Canada, Japan, South Korea, Portugal, Turkey, South Africa, Norway, Finland, and the EPO designating all countries except Luxembourg.

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PM 1446 - SN 657677

(Robotics) AUTOMATIC TESTING OF A PLURALITY OF SMOKING ARTICLES

Wayne B. Adkins, C. T. Higgins, H. J. McCafferty, E. L. Moss, and J. I. Roncero
Development Engineering

A computer-controlled robotic automatic test station that measures a selected number of a plurality of physical parameters of smoking articles and/or smoking article components in a selected sequence.

Schardt/F&N/Isackson
2-19-91 Filed in PTO.

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2020110364

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1447 - SN 657681

(Robotics) METHOD AND APPARATUS FOR MEASURING SMOKING ARTICLES

W. Adkins, C. Higgins, and H. McCafferty
Development Engineering

Method and apparatus for measuring the length of a smoking article for use in an automated test station for measuring physical parameters of smoking articles. The length is measured using an electronic linear array camera to obtain the length dimension along a first axis as the smoking article is advanced from one position to another. The length may be measured while the article is moving or stopped. The length may be measured directly, or indirectly by measuring the length from a selected point.

Schardt/F&N/Isackson
2-19-91 Filed in PTO.

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PM 1448 - SN 657523

(Robotics) APPARATUS AND METHOD FOR REMOVING TOBACCO SHREDS FROM A CIGARETTE FILTER

Wayne B. Adkins and Jose I. Roncero
Development Engineering

An automated method and apparatus for removing tobacco shreds from the end of a smoking article filter severed from a tobacco containing smoking article, such as a cigarette. A mechanical arm of a robot, having opposing gripping members, is used to grip and insert the filter into the deshredding apparatus whereupon a deshredding tool is rotated to contact, and a stream of high-pressure air is simultaneously directed at, any tobacco shreds remaining in the tobacco end of the severed filter portion. An exhaust removes the loosened tobacco shreds. The robot then removes the filter from the apparatus. The filter is then ready to be subjected to characterization tests.

Schardt/F&N/Krasnow
2-19-91 Filed in PTO.
9-23-91 1st action (response due December 23).

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2020110365

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1449 - SN 657657

(Robotics) APPARATUS AND METHOD FOR GRIPPING A CIGARETTE

Wayne B. Adkins and Jose I. Roncero
Development Engineering

Method and apparatus for gripping cigarettes of different dimensions with the same two fingers of a robotic device.

Schardt/F&N/Isackson/Radulescu
2-19-91 Filed in PTO.

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PM 1450 - SN 657436

(Robotics) APPARATUS AND METHOD FOR CUTTING A CIGARETTE

W. Adkins, E. L. Moss, and Jose Roncero
Development Engineering

An automated method and apparatus for cutting a smoking article, such as a cigarette, into sections and removing a component, such as the filter section, from the article, A mechanical arm of a robot having opposing gripping members is used to grip and insert the article into the cutting apparatus whereupon a piston rod causes a blade edge to sever the article just above the filter. After the robot removes the filter from the apparatus, the filter is then ready to be subjected to characterization tests.

Schardt/F&N/Isackson/Radulescu
2-19-91 Filed in PTO.

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20201110366

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1452 DES - SN 622803

(Design) CIGARETTE PACK DISPLAY CONTAINER

David G. Bragin and Frederick M. Della Crosse
New Products Group

A cigarette box container. The container includes a plural-sided body with a transparent plastic face protruding on each side thereby providing a pocket for receipt of a cigarette box. Cigarette boxes placed in each pocket can be viewed through each face. The top wall is protruded above the top edge of the side walls to assist in any stacking of the cigarette box containers, if such stacking is desired.

See also PM 1452

Glenn/F&N/Solomon
12-5-90 Filed in PTO.

Corresponding foreign applications filed in Japan, South Korea, and the EPO designating all countries except Luxembourg.

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PM 1455 - SN 07/605,860

(Delta/Sigma) REFLECTOR SLEEVE FOR FLAVOR GENERATING ARTICLE

Mike Braunshteyn, Drew Gillespie, and John Hamersley
Engineering

A radiant energy reflector sleeve is provided for a smoking or flavor generating article of the type having a heat source and a flavor bed which generates a flavored aerosol or other flavors when heated. The sleeve can be erected from a one-piece foil blank in a continuous or semi-continuous process as part of the assembly of the article.

Schardt/F&N/Ingerman
10-17-90 Filed in PTO.
9-13-91 1st action (response due December 13).
10-16-91 Draft response approved.

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2020110367

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1456 - SN 585224

(Cartier 20) APPARATUS FOR FORMING INNERFRAME FOR CIGARETTE PACK WITH ROUNDED CORNERS

John Tomanovits
Engineerin

Apparatus is shown for preforming a rounded-corner C-shaped innerframe for use in a rounded corner cigarette pack. Contoured rollers are used to preform the rounded corners in the innerframe.

Glenn/F&N/Jackson

9-19-90	Filed in PT0.
6-14-91	Notice of allowance.
9-3-91	Issue fee paid.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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PM 1459 (D658) - SN 661501

LAMINAR FLOW DUST SHIELD FOR WIDE ANGLE LENSE

N. Rowe and W. R. Sweeney
Engineering

Apparatus for preventing the deposition of dust on a surface, for example, the transparent surface of an optical instrument, is provided. The apparatus includes a tube and a hollow porous frustrum. The surface is placed inside the tube. The small opening of the diffuser frustrum is placed adjacent to the surface, and the large opening of the diffuser frustrum is sealed against the inner wall of the tube. Compressed gas is flooded into the tube, passes through the diffuser frustrum and sets up a laminar gas flow away from the surface, thus preventing the deposition of dust on the surface.

Glenn/F&N/Horowitz

2-26-91	Filed in PTO; assignment recorded.
5-16-91	IDS filed.
7-15-91	1st action allowing 1-32 and rejecting 33.
9-17-91	Amendment filed.

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20201110368

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1460 (D636) - SN 642295

APPARATUS AND METHODS FOR CUTTING RODS INTO LENGTHS FOR CIGARETTE MAKERS

M. A. Church, M. H. Dalton, Sherman C. Roane
Engineering

Relates to improvements in cutting a continuous rod of material into lengths, particularly cutting an advancing cigarette rod into uniform lengths.

Glenn/F&N/Isackson
1-17-91 Filed in PTO; assignment recorded.
4-22-91 IDS filed.

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PM 1464 (D642) - SN 688436

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE ADDITIVE

W. G. Chan, H. Grubbs, Y. Houminer, K. Podraza, and T. Sanders
Chemical Research

This invention provides smoking compositions which contain a novel vanillin flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as ethyl 3-(4'-butoxycarbonyloxy-3'-methoxyphenyl)-3-hydroxy-2-phenylpropanoate pyrolyzes into vanillin and ethyl phenylacetate flavorants as volatile components of the cigarette smoke.

Schardt/Depaoli/Giancola
4-22-91 Filed in PTO; assignment recorded.

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2020110369

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1466 (CIP OF PM 1393) - SN 596526

(Paper Technology) WRAPPER FOR A SMOKING ARTICLE

S. D. Baldwin, G. H. Bokelman, B. L. Goodman, B. L. Floyd, and S. S. Tafur
Chemical Research

The sidestream smoke associated with a cigarette or cigarette-like smoking article is reduced by wrapping the tobacco in a paper wrapper having an additive, such as an organic acid, an acidic salt or an organic acid in combination with an acidic salt added thereto.

See also PM 1444, 1494, 1441, and 1511

Glenn/F&N/Miraglia

10-12-90	Filed in PTO with IDS; assignment recorded.
4-19-91	1st action.
7-19-91	Response filed.
9-27-91	Supplemental IDS filed.

Combined with PM 1393 for foreign filing.

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PM 1469DIV - SN 664878

OVERWRAP INSERT

D. A. Thomas, R. M. O'Connell, R. C. Reinert, and J. M. Gillin
Alford Packaging

Paper stock is unwound, printed, folded, laminated and cut to form inserts. The laminated inserts are applied to an overwrap at an appropriately spaced interval. The resultant overwrap can then be wrapped around cigarette packs to provide each pack with an insert without slowing down production.

Schardt/Ostrolenk

3-5-91	Filed in PTO.
5-10-91	Restriction requirement.
9-11-91	1st action (response due December 11).
9-25-91	Action sent to Alford for review by inventors.

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2020110370

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1471 (D637) - SN 630488

TOBACCO ROD SUPPORT AND CONTROL MEANS

K. Vandeveer
Engineering

A longitudinally moving rod support and control apparatus which effectively reduces the bounce and flutter of high speed rods is provided with a top control plate and a bottom rod knocker. This is useful in the tobacco industry where high speed tobacco rods require support and control between processing machines.

Glenn/F&N/Krasnow

12-20-90	Filed in PTO; assignment recorded.
4-2-91	IDS filed.
5-7-91	1st action rejecting all claims.
8-5-91	Amendment filed.
9-10-91	2nd action - final (response due December 10).
10-16-91	Draft response received.

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PM 1474DES (D634) - SN 675463

(Beta) DESIGN - DELIVERY ARTICLE

E. S. Gee, A. C. Lilly, D. B. Losee, J. L. Myracle, Jr., C. H. Morgan, F. M. Sprinkel, F. V. Utsch, and J. F. Whidby

Glenn/F&N/Farber

3-25-91	Filed in PTO; assignment recorded.

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2020110371

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1475 (D633) - SN 615590

(Beta) FLAVOR GENERATING ARTICLE

F. V. Utsch, C. H. Morgan, F. M. Sprinkel, and D. B. Losee
Physical Research

An article is provided in which a flavor generating medium is electrically heated to combustion to evolve inhalable flavors or other components in vapor or aerosol form. The article has a plurality of charges of the flavor generating medium which are heated sequentially to provide individual puffs.

Glenn/F&N/deBlasi

11-19-90	Filed in PTO; assignment recorded.
9-10-91	Examiner requested amending Claim 1 - agreed.
9-13-91	IDS filed.
9-24-91	Notice of allowance (fee due December 24).

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PM 1476 - SN 625923

FILAMENTARY FLAVORANT-RELEASE ADDITIVE FOR SMOKING COMPOSITIONS CONTAINING A MENTHOL-RELEASE ADDITIVE

James M. Washington
Development Engineering

In one embodiment this invention provides a cigarette product which contains a novel type of flavorant-release monofilament. The encapsulated flavorant is released under normal smoking conditions.

Schardt/Depaoli/Giancola

12-11-90	Filed in PTO; assignment recorded.
8-5-91	1st action.
8-13-91	Response filed.

Corresponding foreign applications filed in China, Finland, Hong Kong, Japan, Korea, Norway, Panama, and the EPO designating all countries except Luxembourg.

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2020110372

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1476 DIV - SN 750939

FILAMENTARY FLAVORANT-RELEASE ADDITIVE FOR SMOKING COMPOSITIONS CONTAINING A MENTHOL-RELEASE ADDITIVE

James M. Washington
Development Engineering

In one embodiment this invention provides a cigarette product which contains a novel type of flavorant-release monofilament. The encapsulated flavorant is released under normal smoking conditions.

Schardt/Depaoli/Giancola
8-28-91 Filed in PTO (covers claims 6-11).

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PM 1477 - SN 568351

(Cartier) APPARATUS AND METHOD FOR FORMING HINGED TOP CIGARETTE BOX

Jonah Adams, John Tomanovits, and Duane Wilder
Engineering

An apparatus for forming a hinged top cigarette box having a cross-section with one or more arcuate surfaces from a one piece blank is provided.

See also D689A&B

Glenn/F&N/Pisano
8-15-90 Filed in PTO; assignment recorded.
5-23-91 1st action.
9-23-91 Response and supplemental IDS filed.

Corresponding foreign applications filed in Australia, Japan, South Korea, and EPO designating all countries except Luxembourg.

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20201103 73

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1479 (D680, D732) - SN

(Tomorrow) SMOKING ARTICLE WRAPPER FOR CONTROLLING BURN RATE AND METHOD FOR MAKING SAME

S. D. Baldwin, N. Gautam, K. S. Houghton, R. M. Rogers, J. L. Ryder
Chemical Research

Relates to the control of the burn rate of a cigarette. The burn rate is controlled by the use of a paper wrapper to which regions of cellulosic material is applied and bonded. The cellulosic material is applied during a manufacturing step for the base paper wrapper, either off or on-line of the paper wrapper-forming machine.

Schardt/F&N/Gross
9-10-91 Filed in PTO.

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PM 1480 (D612) - SN 648909

METHODS AND APPARATUS FOR FEEDING AND ASSEMBLING CYLINDRICAL ARTICLES FROM BULK AT HIGH SPEEDS

Bill J. Keen, R. B. Reich, and G. R. Scott
Engineering

Methods and apparatus are provided for sorting and transporting cylindrical articles from a jumbled mass into a continuous stream of uniformly spaced articles aligned end-to-end. The methods include the steps of sorting, spacing and incorporating the spaced apart articles into component assemblies. The invention apparatus comprises a bowl feeder, a series of frictional, suction and lugged belt conveyors and a plurality of vacuum transfer and assembly drums. The apparatus includes means for regulating the sorting and transfer of the articles, for synchronizing transfer of the articles between apparatus subsystems, and for incorporating the articles into component assemblies.

Glenn/F&N/Pisano
1-31-91 Filed in PTO; assignment recorded.

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20201103 74

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1481 (D674) - SN 666926

(Beta) FLAVOR GENERATING ARTICLE

C. H. Morgan and W. A. Nichols
Physical Research

An article is provided in which a replaceable flavor generating medium is electrically heated by a set of permanent reusable heaters to evolve inhalable flavors or other components in vapor or aerosol form. Each heater heats only a portion of the available flavor generating medium so that a plurality of individual puffs of flavor-containing substance can be delivered sequentially to the consumer.

Glenn/F&N/Ingerman
3-11-91 Filed in PTO with IDS; assignment recorded.

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2020110375

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1483 - SN 571878

(Filter Technology - Project Bold) CONCENTRIC SMOKING FILTER HAVING DISCRETE TOW AND WEB FILTER MEDIA

C. W. Arterbery, W. T. Callaham, G. D. Keritsis, M. F. White
Cigarette Technology

A concentric smoking filter in which one of the filter media is a fibrous tow, such as fibrous cellulose acetate tow, and one of the filter media is a web material, such as paper, is provided. The filter improves the taste, particularly, of ultra-light cigarettes.

Schardt/F&N/Ingerman

8-20-90	Draft IDS received.
8-24-90	Filed in PTO; assignment recorded.
11-26-90	IDS filed.
12-20-90	1st action rejecting all claims.
4-12-91	Response filed.
7-29-91	2nd action - final.
8-16-91	Action discussed by phone with Ingerman.
10-4-91	Draft CIP applications sent to Callaham for review.

Corresponding foreign applications filed in Australia, Canada, Finland, Hong Kong, Hungary, Japan, Norway, Poland, South Korea, Saudi Arabia, USSR, Taiwan, Turkey, and the EPO designating all countries except Luxembourg.

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2020110376

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1484 - SN 576776

(Pack Coupon for Ft Box) CIGARETTE PACK WITH PARTLY REMOVABLE INNERFRAME

Donald H. Evers
Engineering

A box-like cigarette pack has an innerframe which initially extends upward into what is normally a cutout in the front of the innerframe. This extension may then continue over the top of the cigarettes in the pack. The innerframe is weakened along the line which normally defines the cutout. When the consumer first opens the pack, he or she can remove the innerframe extension by tearing or separating along this line of weakening. Thereafter, the pack is like a normal pack. Additional information can be printed on the removable portion or portions of the innerframe. If provided, the portion which initially extends over the cigarette tops is a convenient size for use as a coupon or the like.

See also CIP 1581 and 1583

Schardt/F&N/Jackson

9-4-90	Filed in PTO; assignment recorded.
9-7-90	Innerframe variation received from Evers.
10-30-90	IDS filed.
4-10-91	1st action.
5-29-91	Response filed.
7-3-91	2nd action - FINAL (response due October 3).

Combined with PM 1484II for foreign filing.

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20201103777

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1484 CIP - SN 766050

(Pack Coupon for Ft Box) CIGARETTE PACK WITH PARTLY REMOVABLE INNERFRAME

Donald H. Evers
Engineering

A box-like cigarette pack has an innerframe which initially extends upward into what is normally a cutout in the front of the innerframe. This extension may then continue over the top of the cigarettes in the pack. The innerframe is weakened along the line which normally defines the cutout. When the consumer first opens the pack, he or she can remove the innerframe extension by tearing or separating along this line of weakening. Thereafter, the pack is like a normal pack. Additional information can be printed on the removable portion or portions of the innerframe. If provided, the portion which initially extends over the cigarette tops is a convenient size for use as a coupon or the like.

See also CIP 1581 and 1583

Glenn/F&N/Jackson
9-26-91 Filed in PTO.
9-25-91 Proposed IDS received.

Combined with PM 1484II for foreign filing.

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2020110378

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1484 II - SN 659712

(Pack Coupon for Ft Box) CIGARETTE PACK WITH PARTIALLY REMOVABLE INNERFRAME

D. H. Evers
Engineering

A box-like cigarette pack includes an innerframe with a front wall having an initially lower portion which is folded up so that it projects into the cutout conventionally provided in the upper portion of the innerframe front wall. All or part of the folded-up portion may be made readily removable by providing a line of weakness between the removable part and the remainder of the innerframe. The folded-up portion may be printed with any desired information and may form a coupon or coupon-like article when removed. Until removed, the folded-up portion may be somewhat of an impediment to easy removal of cigarettes, thereby prompting the consumer to remove it as intended.

See also PM 1538, 1581

Schardt/F&N/Jackson
2-25-91 Filed in PTO; assignment recorded.
4-29-91 IDS and formal drawings submitted.
9-17-91 Second supplemental IDS filed.

Corresponding foreign applications filed in Australia, Japan, and the EPO designating all countries except Luxembourg.

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PM 1485 (D679) - SN 709023

(Beta-Related) CONTROL DEVICE FOR FLAVOR-GENERATING ARTICLE

F. M. Sprinkel
Physical Research

A control device for electrically heated flavor generators. Sensors detect user lip activity associated with taking a draw and trigger heating of flavor-generating materials.

Glenn/F&N/Bergin
5-31-91 Filed in PTO.
7-29-91 Assignment recorded.

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2020110379

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1486 - SN 573865

SCORED INNERFRAME FOR HINGED LID CIGARETTE PACK

X. M. Pham
Engineering

A hinged lid cigarette pack with rounded edges having an outer sleeve member within which is fitted an innerframe. The innerframe is provided with a front wall, side walls, rear walls and scored transitional panels interposed between the walls. The innerframe is bent about the score lines to conform closely to and fit within the contours of the rounded edges of the cigarette packs. The rear walls of the innerframe wrap around the cigartte bundle contained in the pack and frictionally engage the rear rounded corners of the pack, hinge and lid, thereby stabilizing the closed position of the hinged lid.

Glenn/F&N/Isackson/Panichi

8-28-90	Filed in PTO without formal papers.
1-22-91	1st action rejecting all claims.
4-22-91	Amendment filed.
7-25-91	2nd action (response due October 25).

No corresponding foreign applications.

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2020110380

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1487 - SN 573884

APPARATUS AND METHOD FOR MAINTAINING CLOSED HINGED LID BOXES

X. M. Pham
Engineering

A hinged lid box having an innerframe and rounded corners and means for maintaining the box substantially closed. The means includes a second front panel of material affixed in superposition to the interior front panel of the box lid to engage the innerframe of the box, providing increased structurel support and frictional forces that retain the box in a closed position. The second panel of material has approximately the same width at the lid panel and a height that is greater than 50 percent and less than 100 percent of the height of the box lid. The panel also may have tabs extending from the panel into the rounded corners of the box so that the tabs are interposed between the innerframe corners and the lid corners when the lid is closed.

Glenn/F&N/Panichi

8-28-90	Filed in PTO; assignment recorded.
11-30-90	Action - restriction requirement.
2-5-91	1st action.
7-5-91	Response filed.

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20201110381

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1488 - SN 573883

INTERLOCKING CLOSURE FOR HINGED LID BOXES

X. M. Pham
Engineering

A hinged lid box having an innerframe and interlocking means for maintaining the box substantially closed. The interlocking means includes a panel of material including a tab that is secured to the inside of the front panel of the lid so that the tab is opposed to but not secured to the lid surface whereby the tab is disposed to pass inside the innerframe during closure. The innerframe is thus frictionally engaged by the tab and the opposing surface of the front panel of the lid to retain the lid closed. The tab may be formed by a slit in the panel of material and provided with a score line to facilitate bending the tab at the desired location to engage the innerframe. The tab also may be formed by cutting a notch in the panel, thereby providing a space between the tab and the panel from which the tab is cut. The notch may be provided with a configuration that facilitates inserting the tab behind the innerframe. Means for raising the tab a distance above the surface of the panel of material also may be provided. More than one tab may be used, preferably two tabs spaced apart and proximate to the front corners of the lid. The interlocking means is suitable for boxes having rounded corners.

Glenn/F&N/Panichi

8-28-90	Filed in PTO.
11-30-90	Action - restriction requirement.
12-20-90	Response filed electing claims 1-43 and 55-58.
2-5-91	1st action.
7-5-91	Response filed.

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20201110382

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1490 DES - SN 568317

(Design) BOX HAVING VERGE LINES AND PINSTRIPING AT REGIONS ABOUT ROUNDED SIDE PORTIONS

R. L. Graham, X. M. Pham, Donald H. Evers, and F. M. Della Crosse
Engineering

Design for a box having verge lines and pinstriping at regions about rounded side portions.

See also CIP PM 1524DES

Glenn/F&N/Isackson
8-15-90 Filed in PTO; assignment recorded.

No corresponding foreign applications.

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PM 1496 (D692) - SN 693656

AIR VENTILATION SYSTEM

J. O. Lephardt and R. A. Tamol
Analytical/Development Engineering

Relates to an air ventilation system for ventilating, heating, cooling or purifying areas such as rooms, houses, theaters, offices or any partitioned spaces. Comprises an air permeable carpet material placed over perforated flooring that is supported by a below-floor air distribution system and an in-ceiling air exhaust vent system.

Glenn/F&N/Brook
4-30-91 Filed in PTO; assignment recorded.
7-30-91 IDS filed.

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20201110383

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1497 (D495) - SN 671010

TAMPER-INDICATING WRAPPERS

R. J. Versic and D. D. Emerick (Ronald T. Dodge Co.)
Chemical Research

A tamper-indicating wrapper in which multi-layer, laminated wrappers wherein a visible change between layers of the wrapper indicate that the wrapper has been punctured or that there has been tampering with the wrapper or its contents. The wrapper may be composed of two or more plies of packaging material such as films made from ethylene vinyl alcohol copolymer or from polyolefins such as polypropylene. In one construction, a transparent or translucent laminated wrapper becomes opaque upon rupture or puncture. In other constructions, a transparent or translucent wrapper becomes colored at the site of the rupture or puncture.

Schardt/F&N/Hintz
3-18-91 Filed in PTO; assignment recorded.
5-28-91 IDS filed.

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PM 1498 - SN 605402 *** ABANDONED ***

(Paper Technology) PROCESS FOR MAKING WRAPPERS FOR SMOKING ARTICLES WHICH MODIFY THE BURN RATE OF THE SMOKING ARTICLE

J. L. Myracle
Product Development

A process for making smoking article wrappers so as to modify the mass burn rate of the smoking article.

See also PM1368 and D741

Schardt/F&N/Hubbard
10-30-90 Filed in PTO; assignment recorded.
9-6-91 IDS filed.
9-10-91 Notice of allowance.
10-17-91 Abandoned for Continuation.

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20201110384

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1498 CONT - SN _____

(Paper Technology) PROCESS FOR MAKING WRAPPERS FOR SMOKING ARTICLES WHICH MODIFY THE BURN RATE OF THE SMOKING ARTICLE

J. L. Myracle
Product Development

A process for making smoking article wrappers so as to modify the mass burn rate of the smoking article.

See also PM1368 and D741

Schardt/F&N/Hubbard
Filed in PTO.

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PM 1499 - SN 594325

MULTI-PACK FLIP-TOP CIGARETTE CARTON

Pam Moore, Nick Pitt, and Howard Vogt
PM International

A paperboard blank is provided for a multi-pack, flip-top cigarette carton. The carton blank has front, back and side panels, top and bottom flaps, and dust flaps. These sections of the carton blank are separated by score lines in such a manner that the blank can be readily formed by conventional means to form a multi-pack, flip-top cigarette carton.

Glenn/F&N/Nix

10-9-90	Filed in PTO; assignment recorded.
3-1-91	IDS filed.
7-17-91	1st action rejecting all claims.
10-16-91	Response and formal drawings filed.

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2020110385

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1514 - SN 661809

METHODS AND APPARATUS FOR OPTICALLY DETERMINING THE ACCEPTABILITY OF PRODUCTS

K. A. Cox, Henry M. Dante, and R. J. Maher

The acceptability of the appearance of objects such as consumer products is determined by forming an initial discriminant function as a composite of a relatively small number of images which are known to be acceptible. This initial discriminant function is then used to gather statistical information about how a first relatively large number of images compares to the initial discriminant function. Thereafter, this statistical information is used to select or aid in the selection of acceptable images from a second relatively large number of images, and the images selected as acceptable are used to refine the discriminant function. The refined discriminant function is then used (e.g., during actual product inspection) to determine which objects have an acceptable appearance and which do not.

Related to PM 1334 and 1514

Glenn/F&N/Jackson

2-27-91	Filed in PTO.
4-18-91	Assignment recorded.
6-27-91	IDS filed.
8-2-91	1st action allowing 29-40 and rejecting 1-28 (response due Nov. 2).
9-17-91	Draft amendment received.

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PM 1515 (D706) - SN 660932

SMOKING COMPOSITIONS CONTAINING A TARTRATE SALT FLAVORANT-RELEASE ADDITIVE

Y. Houminer and J. Naworal
Chemical Research

This invention provides smoking compositions which contain a novel tartrate salt flavorant-release additive, such as an acetal derivative. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive pyrolyzes and releases benzaldehyde flavorant as a volatile component of the cigarette smoke.

Schardt/Depaoli/Giancola

2-26-91	Filed in PTO; assignment recorded.

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2020110386

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1516 (D709) - SN 669571

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A FLAVORANT-RELEASE ADDITIVE

B. A. Demian
Flavor Development

This invention provides smoking compositions which contain a novel flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as a molecular inclusion complex of a beta-cyclodextrin torus structure and vanillin releases vanillin as a volatile component of the cigarette smoke. The released vanillin improves the taste of the mainstream smoke and imparts a pleasant aroma to the sidestream smoke.

Schardt/Depaoli/Giancola
3-14-91 Filed in PTO; assignment recorded.
6-18-91 IDS filed.

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PM 1518 (D714) - SN 684568

PAPER WRAPPER HAVING IMPROVED ASH CHARACTERISTICS

E. B. Sanders, S. D. Baldwin, B. L. Goodman, C. W. Arterbery, J. L. Myracle
Cigarette Technology

Relates to a paper wrapper construction for use in conjunction with a smoking article, such as a cigarettes. Specifically, the paper wrapper of the invention has improved ash characteristics.

See also D480 and PM 1596

Glenn/F&N/Miraglia
4-12-91 Filed in PTO; assignment recorded.
7-3-91 IDS filed.

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2020110387

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1522 - SN 717064

(NET) PROCESS FOR IMPREGNATION AND EXPANSION OF TOBACCO

K. H. Cho, T. J. Clarke, J. M. Dobbs, E. B. Fischer, J. M. G. Nepomuceno, and R. Prasad
Physical Research

Relates to a process for expanding the volume of tobacco using carbon dioxide.

Glenn/F&N/McCabe
6-18-91 Filed in PTO; assignment recorded.

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PM 1523 - SN 742323

PRODUCT APPEARANCE INSPECTION METHODS AND APPARATUS EMPLOYING LOW VARIANCE FILTER

K. A. Cox, H. M. Dante, R. J. Maher
Physical Research

A comprehensive package inspection method to identify bad packages by means of automatic inspection.

Related to PM 1514, 1334, Itran Agreement File

Glenn/F&N/Jackson
8-8-91 Filed in PTO.
9-10-91 IDS filed.

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2020110388

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1524DES (CIP OF PM 1490) - SN 631790

(Cartier) DESIGN - BOX HAVING VERGE LINES AND PINSTRIPING AT REGIONS ABOUT ROUNDED SIDE PORTIONS

R. L. Graham, Z. M. Pham, D. H. Evers, and F. M. Della Crosse
Engineering

Glenn/F&N/Adler
12-21-90 Filed in PTO.
2-19-91 Assignment recorded.

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PM 1525 - SN 700759

(Project Gold) CIGARETTE PACKAGING MACHINE AND APPARATUS

J. M. Adams, A. Amendola, F. M. Della Crosse, R. Gallino, J. M. S. Haskins, D. Moir, X. M. Pham, K. B. Shepard, and R. M. Stewart

Relates to manufacturing cigarette packages in which the packaging stock is coated with adhesive before it is supplied to the packaging machine and the machine provides means for activating the adhesive, and preferably setting the adhesive after it has been activated.

Glenn/F&N/Ingerman
5-15-91 Filed in PTO.

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20201110389

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1531 (D735) - SN 718781

IMAGE INSPECTION METHODS AND APPARATUS

D. M. Ennis
Product Evaulation

Relates to methods and apparatus for determining whether or not an image is substantially like other images.

Glenn/F&N/Jackson
6-21-91 Filed in PTO; assignment recorded.
9-10-91 IDS filed.
9-20-91 Formal drawings submitted.

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PM 1553 (D770) - SN 757567

A VOLUMETRIC CHEMICAL REACTION SYSTEM

R. L. Augustine and S. Tanielyan(Seton Hall)

Provides a multipurpose volumetric chemical reaction system which operates at constant pressure and volume, and has electronic automation means for calculating kinetic parameters and a concentration-time plot from the system data output. The automated system is adapted to conduct and monitor either gas-consuming or gas-generating reactions. gas input or gas venting is accomplished in timed constant volume pulses.

Schardt/Depaoli/Giancola
9-11-91 Filed in PTO.

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Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1556 (D776) - SN 757563

A FLOW LIQUID-PHASE CHEMICAL REACTION SYSTEM

R. Augustine and Glen Wolosh (Seton Hall)

Provides a flow liquid-phase chemical reaction system for selective conversion of organic compounds with a gas reactant. Has novel means for control of the molar ratio of gas reactant and organic compound dissolved in a solvent medium flowing through a catalyst bed.

Schardt/Depaoli/Giancola
9-11-91 Filed in PTO.

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PM 1570 (D811, D812) - SN _____

(Bold/Tomorrow) SMOKING ARTICLES USING NOVEL PAPER WRAPPER

S. D. Baldwin, E. B. Sanders, J. L. Myracle, B. L. Goodman, C. W. Arterbery, W. A. Geiszler, B. Floyd, and W. E. Claflin
Cigarette Technology

Specifically, uses wrappers which alter the characteristics of the smoking article including puff count, tar delivery and carbon monoxide delivery by adjustment of the paper wrapper's calcium carbonate filler level and of the paper wrapper's basis weight.

Glenn/F&N/Rhoads
4- -91 Filed in PTO.

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2020110391

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1572 (D778) - SN 713306

SMOKING COMPOSITIONS CONTAINING A PYRAZINEETHANOL FLAVORANT-RELEASE ADDITIVE

G. Chan and Y. Houminer
Chemical Research

Provides smoking compositions having incorporated therein a flavorant component which is characterized by lack of mobility and/or volatility at ambient temperature. Under normal smoking consitions, the flavorant-release additive imparts improved flavor to mainstream smoke and improved aroma to sidestream smoke. For incorporation in wrappers.

Schardt/Depaoli
6-11-91 Filed in PTO; assignment recorded.

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PM 1575 (D798) - SN 700401

(Ambrosia) SMOKING COMPOSITIONS CONTAINING A VANILLIN-RELEASE ADDITIVE

R. Southwick
Chemical Research

This invention provides smoking compositions which contain a vanillin carboxylate type flavorant-release additive. Under cigarette smoking conditions, a combustible filler and/or paper wrapper additive such as 5-carboxyethylvanillin pyrolyzes and releases ethylvanillin as a volatile flavorant component of the cigarette smoke.

See also PM 1418, 1430

Schardt/Depaoli/Giancola
5-15-91 Filed in PTO; assignment recorded.

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2020110392

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1581 (CIP OF PM 1484) (D804) - SN 766048

(Pack Coupon for FT Box) CIGARETTE BOX WITH ATTACHED COUPON

D. H. Evers
Package Engineering

See also PM 1538

Glenn/F&N/Jackson
9-26-91 Filed in PTO.

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PM 1590 (Ace100, D791) - SN

(Project Ace 100) TWO SEPARATE CARTONS COMBINED AS A SINGLE UNIT BY ADHESIVE/CARRIER MEANS

J. M. Adams, C. N. Chance, J. A. DeBlasio, D. H. Evers, W. C. Harris, M. A. Kirby, R. W. Newsome, R. E. Talley, W. P. Taylor, E. J. Wooldridge

Engineering

Relates to the connection of two separate cigarette cartons each of which contain a single row of five cigarette packs such that the combination of the two cartons has substantially the same dimensions as a standard cigarette carton which contains two rows of five cigarette packs per row.

Schardt/F&N/Horowitz
10- -91 Filed in PTO.

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2020110393

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000

PM 1596 (D790) - SN 684603

CIGARETTE AND WRAPPER WITH CONTROLLED PUFF COUNT

S. D. Baldwin, R. W. Dwyer, D. J. Newman, B. Floyd, R. M. Rogers, E. B. Sanders, and B. L. Goodman
Cigarette Technology

Relates to a paper wrapper construction for use in conjunction with a smoking article, such as a cigarette. Specifically, the paper wrapper alters the characteristics of the smoking article including burn rate, puff count, and tar delivery with the use of fine particle size calcium carbonate as a mineral filler.

Glenn/F&N/Miraglia

4-12-91	Filed in PTO.
6-10-91	Assignment recorded.
7-3-91	IDS filed.

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PM 1616 - SN 710514

HINGED LID CIGARETTE CARTON WITH INNERFRAME, AND BLANK AND METHOD THEREFOR (for Marlboro Medium introduction)

Linda S. Latif

Relates to cigarette pack cartons with resemble and function like hinged lid cigarette boxes.

Glenn/F&N/Jackson

6-3-91	Filed in PTO.
7-15-91	Assignment recorded.
8-26-91	Formal drawings and IDS filed.

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2020110394

Source: https://www.industrydocuments.ucsf.edu/docs/jygj0000